## FINAL ARGUMENT re GRASSY MOUNTAIN COAL PROJECT HEARING

Participant : Jim Rennie

Jan.5, 2021

To the Panel : During the hearing process, the proponent, Benga, has shown a lack of understanding in regard to the Cutthroat trout population in Gold Creek downstream from the proposed coal mine. They have no historical fish population data and did not consider the 2010 electrofishing study done by Alberta Conservation Association (ACA). Benga's 2016-2019 surveys indicated very few fish downstream of Caudron Creek and they incorrectly assumed this to be due to a low spatial frequency of overwintering pools and frequent summertime droughts. They have proposed misguided enhancement strategies for these supposed conditions.

The truth is that Gold Creek historically had a high density population of trout downstream from Caudron Creek for many years prior to the coal spill in 2015. Please refer to my fish population data from 1993 to 2020 presented in CIAR# 527. (Rennie, 2020) Also, the ACA electrofishing surveys from 2010 documented a good number of cutthroat trout estimated at 173 fish per Km, confidence interval 47 to 357 trout per Km, from 4 locations downstream of Caudron Creek ( ref: Blackburn,2011). The coal spill in 2015 located near Caudron Creek killed 95% of the trout in my 2 study areas located 6 Km downstream from Caudron Creek. Benga's fish surveys were done AFTER the 2015 coal spill, so their surveys done downstream of Caudron Creek were after the coal spill and fish kill, thus only measuring the few survivors of the spill. That is not adequate baseline data.

As noted in CIAR# 527, the mechanism of old spoil pile failure caused the 2015 spill, and a number of spoil piles along the east side of Grassy Mountain are at a steep angle, easily disturbed by any future coal mining activity. Repeat spills would be likely if the mine went ahead.

There have been minor spoil pile failures in the past, but the Gold Creek fish population has demonstrated the ability to rebound from those minor failures. The 2015 spill was an unprecedented major event. At present, I don't believe the scarce number of remaining cutthroat trout in the lower 10 Km of stream below Caudron Creek can survive any more stresses caused by new coal mining activity, be it spoil pile spills, chronic increased sedimentation, increased water temperature or decreased groundwater flow. This species at risk population of Cutthroat trout needs protection to rebuild through natural spawning and repopulation. We have the means to protect it under federal protection order subsection 58(4) and 58(5) of the Species at Risk Act and the Alberta population annexed order SOR/2014-241 by denying the application to build the Grassy Mountain Coal Project.

Sincerely, Jim Rennie

## REFERENCES

Blackburn, J. Crowsnest River drainage sport fish population assessment, 2010. Technical Report T-2011-001, produced by Alberta Conservation Association, Lethbridge, Alberta, Canada.

Rennie, J. CIAR# 527 Submission to Grassy Mountain Coal Project Hearing REF # 80101, Sept.4, 2020.